

# **\*\*ATTENTION\*\***

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*Please help control,  
not spread,  
purple loosestrife*

**For more information contact:  
Your local noxious weed control agency  
listed in the telephone book**

**Washington State Noxious Weed Control Board  
(206) 872-6480**

**Washington Department of Agriculture  
Noxious Weed Program  
(206) 586-5306**

**Washington Department of Wildlife  
(206) 753-5700**

**Washington State Cooperative Extension  
(Call your county extension office)**

**National Audubon Society,  
Washington State Office  
(206) 786-8020**

**Puget Sounders  
(206) 676-8094**

## How did purple loosestrife get here?

Wetlands are a valuable resource. They provide fish and wildlife habitat, improve water quality, store floodwater, and provide recreation. During Washington's first century, over half the state's wetlands were lost. In the Puget Sound region, nearly 90% of the original wetlands have been drained, filled, or otherwise permanently altered.

While we've learned the importance of preserving our natural wetlands, this valuable resource is facing a quiet threat by a beautiful, but deadly plant—purple loosestrife.

Purple loosestrife (*Lythrum salicaria*) is an foreign weed that spreads quickly and chokes the very life out of a wetland. Native to Europe and Asia, it was introduced to North America in the 1800s. The tall, hardy perennial spread dramatically throughout New England, the Great Lake states and provinces, and across the northern tier states. Like other intro-

duced foreign plants, loosestrife has no known natural enemies in North America and has multiplied with no natural checks and balances.

This herbaceous, semi-aquatic plant was first reported in Washington in the 1920s. Loosestrife has spread prolifically throughout Washington in the last few years, partly with the help of people unaware of the threat to wetlands. Today it is found in 25 of the 39 Washington counties.

Because it is such an attractive plant, nurseries sold purple loosestrife to gardeners until

a quarantine was enacted in Washington in 1990. Some beekeepers, valuing the perennial as a source of nectar and pollen, were also responsible for spreading it. In addition, a number of private seed companies have offered wildflower seed mixes which have included

purple loosestrife. Disturbance of shorelines from construction and development often contributes to the establishment and expansion of loosestrife stands.

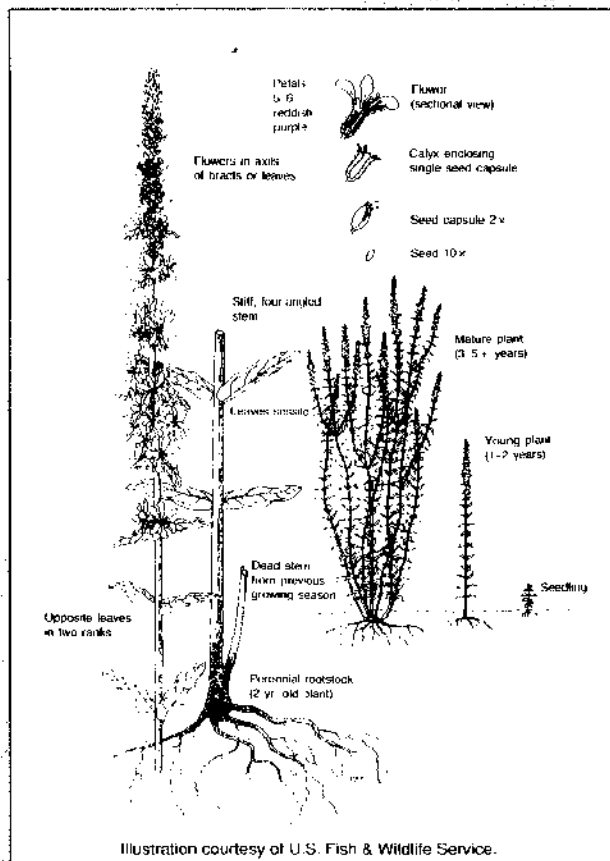
## What does loosestrife look like?

Purple loosestrife can be confused with several beneficial native wetland plants such as fireweed, Douglas spirea, blue vervain, and blazing star, so proper identification is important.

Loosestrife is easiest to identify when it is in full bloom—July through September. Its brilliant

purple or magenta flowers on an upright stalk make it conspicuous even from a distance. The mature, bushy plants can grow as tall as 10 feet.

The stems have long flower spikes with five or six petals per flower. The leaves vary, but are usually opposite each other with a tongue-like shape and smooth edges. They are attached without a leaf stem to a four-sided main stalk. The roots, comprised of a woody taproot with a fibrous root system, form a dense mat that makes adult plants difficult to pull.



## *How does loosestrife spread?*

This prolific seed producer readily sprouts from cut-off stems, underground roots, and plant fragments. Several stalks can grow from a single plant, and each stalk can produce between 100,000 and 300,000 seeds in dense, spiralling rows of dark-brown seed capsules.

The tiny seeds, about the size of ground pepper, are also transported by water, wind, and feathers and fur of aquatic birds and mammals. Seeds that get attached to muddy footwear, boats, boat trailers, and vehicle treads can travel far from the original site to spread this purple menace.

The seeds may remain viable for many years when submerged, waiting for the opportunity to sprout. Suddenly during a dry summer, the seeds can germinate. Seed dispersal is so effective that young seedlings can completely replace native vegetation.

## *How is loosestrife a threat?*

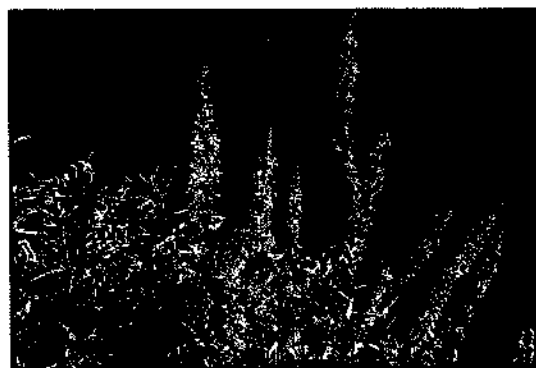
Although purple loosestrife prefers moist, organic soils and full sun, it can survive and multiply in many soil types and moisture conditions, like so many noxious weeds. Purple loosestrife infests habitats such as wet meadows, pasture wetlands, cattail marshes, stream and river banks, lake shores, irrigation ditches, drainage ditches, and stormwater retention basins.

Loosestrife harms wetlands by crowding out native wetland plants like cattail and bulrush, and by eliminating nutritional food sources and shelter for wetland wildlife that has adapted to specific plant communities. When conditions are right, a small isolated cluster of loosestrife plants can spread and cover a marsh in just one growing season, spelling a quiet death for wetlands as a natural ecosystem.

## *What are some impacts?*

When purple loosestrife overruns wetlands, some of the wildlife affected are:

- Waterfowl—mallard, teal, widgeon, Canada goose, pintail and gadwall
- Furbearers—muskrat, beaver
- Marsh birds—grebe, bittern, black-crowned night heron, Virginia rail, sora
- Shorebirds—avocet, yellowleg, killdeer, common snipe, Wilson's phalarope, long-billed dowitcher
- Raptors—northern harrier, Swainson's hawk, rough-legged hawk, American kestrel, barn owl, short-eared owl, great horned owl
- Songbirds—eastern kingbird, swallow (bank, cliff, barn), yellow-headed blackbird, red-winged blackbird
- Amphibians and reptiles—western pond turtle (in western WA)
- Aquatic insects—species requiring low vegetation and light penetration



Purple loosestrife also chokes out both natural and artificial waterways, slowing natural flows and promoting the deposit of silt. This process causes long-term water quality degradation and requires costly maintenance including dredging and cleaning of drainage and irrigation ditches. This maintenance can become a financial burden to farmers, other landowners, and public agencies.

Wetlands and waterways are important recreational resources because of fish and wildlife abundance and diversity. As purple loosestrife invades a wetland, both wildlife and recreation are lost, and shore access becomes very difficult where loosestrife dominates a plant community. The loss of hunting and fishing recreation hurts local economies.

We value our wetlands. That is why private organizations and state and federal agencies are investing millions of dollars to preserve wetlands as wildlife habitat and sustain recreation. Those investments suffer when purple loosestrife takes over.

## *How can we approach the problem?*

Experts say that because purple loosestrife is so widespread in the United States, its total eradication is unlikely. But the spread of loosestrife can be halted and newly invaded areas can be controlled.

Washington is now fighting this quiet threat. In 1990, the Washington Department of Agriculture added purple loosestrife to the state noxious weed list and adopted a regulation to forbid the sale and transport of ornamental varieties.

In addition, the state legislature funded a project to begin a coordinated effort to bring agencies together to solve the problem. The multi-agency effort includes the Washington departments of Wildlife, Agriculture, and Ecology, the State Noxious Weed Control Board, the Federal Bureau of Reclamation, the South Columbia Basin Irrigation District, Grant County Noxious Weed Control Board, the Office of Financial Management, and Washington State University.

During 1990, these agencies developed a strategy to try a variety of methods to control the loosestrife problem. It included:

- Hand spraying with chemicals
- Clipping tops and daubing with small quantities of herbicide
- Promoting research on insects that control loosestrife
- Using aerial photography to map and create an inventory of infestations
- Developing information and public involvement efforts
- Mowing
- Mulching with plastic

Together, citizens and government agencies are responding to the threat. The key to stopping the spread of loosestrife involves the three Rs—Recognize, Report, and Remove. You can make a difference. You can join organizations that help to control the purple loosestrife invasion or you can act as an individual.

## *What can you do?*

- Recognize loosestrife. Look for its appearance during the summer months and learn to distinguish loosestrife from its beneficial look-alikes such as fireweed.
- Report loosestrife. Contact the landowner upon whose property loosestrife is growing and call your local weed control agency or the state Department of Agriculture.
- Remove loosestrife. If it's on your property, your

local extension agent or weed control agent can provide information on removing it. If it's on someone else's property, contact the landowner and notify local groups dedicated to loosestrife control.

You can remove small clusters of up to 100 loosestrife plants by hand.

- Pull young plants—bag and destroy the plant materials.
- Dig up older plants—remove all the roots you see. If the entire root system is not taken, the plant will quickly resprout. If plants are mowed, the stems will actually sprout new roots, multiplying the problem, unless they are destroyed.
- Cut off flower heads, bag them, and destroy them.

This won't necessarily kill the plant, but it will prevent millions of seeds from ripening and spreading.

*Please note that local ordinances and state law may forbid disturbance of wetlands—check with authorities before you attempt to remove loosestrife from an area. Also, make sure you have landowner permission before you enter a wetland or attempt to remove loosestrife.*

